

## EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
S1	161	(fukuda-k\$.inv. tanaka-i\$.inv. tani-m\$.inv. matsuo-j\$.inv.) and (membrane near3 electrode mea pem pemfc polymer near2 electrolyte)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/03/14 16:14
S2	48	S1 and sulfon\$7	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/03/13 16:55
S3	23	S1 and sulfonat\$7	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/03/13 16:55
S4	0	membrane same (sulfonated polyarylene) same carbon near3 fiber same carbon with (catalyst platinum)	EPO; JPO; DERWENT	OR	ON	2007/03/14 16:18
S5	0	membrane and (sulfonated polyarylene) same carbon near3 fiber same carbon with (catalyst platinum)	EPO; JPO; DERWENT	OR	ON	2007/03/14 16:18
S6	0	membrane and (sulfonated polyarylene) and carbon near3 fiber and carbon with (load\$4 catalyst platinum)	EPO; JPO; DERWENT	OR	ON	2007/03/14 16:18
S7	332	membrane and (sulfonated polyarylene) and carbon near3 fiber and carbon with (load\$4 catalyst platinum)	US-PGPUB; USPAT	OR	ON	2007/03/14 16:19
S8	4	membrane and (sulfonated polyarylene) same carbon near3 fiber same carbon with (load\$4 catalyst platinum)	US-PGPUB; USPAT	OR	ON	2007/03/14 16:19
S9	8	(sulfonated polyarylene) same carbon near3 fiber same carbon with (load\$4 catalyst platinum)	US-PGPUB; USPAT	OR	ON	2007/03/14 16:19
S10	3	(sulfonated polyarylene) same carbon near3 fiber same carbon with (load\$4 catalyst platinum)	EPO; JPO; DERWENT	OR	ON	2007/03/14 16:26

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S11	6	(positive near3 electrode cathode) and (sulfonated polyarylene) same (carbon near3 fiber pore near4 form\$6) same carbon with (load\$4 catalyst platinum)	US-PGPUB; USPAT	OR	ON	2007/03/14 16:27
S12	2	S11 not S9	US-PGPUB; USPAT	OR	ON	2007/03/14 16:33
S13	5017	polyarylene	US-PGPUB; USPAT	OR	ON	2007/03/14 16:33
S14	161	(fukuda-k\$.inv. tanaka-i\$.inv. tani-m\$.inv. matsuo-j\$.inv.) and (membrane near3 electrode mea pem pemfc polymer near2 electrolyte)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/03/14 16:33
S15	8	S13 and S14	US-PGPUB; USPAT	OR	ON	2007/03/14 16:34
S16	2608	S13 and sulfon\$5	US-PGPUB; USPAT	OR	ON	2007/03/14 16:34
S17	870	S13 with sulfon\$5	US-PGPUB; USPAT	OR	ON	2007/03/14 16:34
S18	11	S17 same (cathode positive near3 electrode)	US-PGPUB; USPAT	OR	ON	2007/03/14 16:38
S19	9	S18 not S14	US-PGPUB; USPAT	OR	ON	2007/03/14 16:35
S20	24	S17 same (catalyst platinum carbon near4 (black fiber)) and (cathode positive near3 electrode)	US-PGPUB; USPAT	OR	ON	2007/03/14 16:39
S21	1	"6825310".pn.	US-PGPUB; USPAT	OR	ON	2007/03/28 08:35
S22	0	"2004096731".pn.	US-PGPUB; USPAT	OR	ON	2007/03/28 08:35
S23	0	"2004096731"	US-PGPUB; USPAT	OR	ON	2007/03/28 08:35
S24	1	hama-y\$.inv. and iguchi-m\$.inv. and yano-j\$.inv. and kanaoka-n\$.inv. and mitsuta-n\$.inv.	US-PGPUB; USPAT	OR	ON	2007/03/28 08:38
S25	0	koyama-t\$.inv. and morishima-m\$.inv. and kobayashi-t\$.inv. and kamo-t\$.inv. and higashiyama-k\$.inv.	US-PGPUB; USPAT	OR	ON	2007/03/28 08:46
S26	2	wo near4 "9725369"	EPO; DERWENT	OR	ON	2007/03/28 09:07
S27	2	"6258861".pn. "5834523".pn.	US-PGPUB; USPAT	OR	ON	2007/03/28 08:48

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S28	2	wo near4 "9934467"	EPO; DERWENT	OR	ON	2007/03/28 09:14
S29	1	wo near4 "2003069713"	EPO; DERWENT	OR	ON	2007/03/28 09:14
S30	1	"6602630".pn.	US-PGPUB; USPAT	OR	ON	2007/03/28 10:27
S31	177930	"30" and cathode	US-PGPUB; USPAT	OR	ON	2007/03/28 10:27
S32	1	"6602630".pn.	US-PGPUB; USPAT	OR	ON	2007/03/28 10:27
S33	1	S32 and cathode	US-PGPUB; USPAT	OR	ON	2007/03/28 13:56
S34	8	(cathode positive near3 electrode) near4 (catalyst electrocatalyst) with carbon near3 black with carbon near3 fiber with (perfluoroalkylene nafion tetrafluoroethylene perfluorosulfonic ion near2 conduct\$4 near2 polymer)	US-PGPUB; USPAT	OR	ON	2007/03/28 14:09
S35	16	("4729932"   "5084144"   "5366818"   "5478662"   "5789092"   "5798186"   "6068941"   "6103410").PN. OR ("6479177"). URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2007/03/28 14:02
S36	13	(cathode positive near3 electrode) near4 (catalyst electrocatalyst) same carbon near3 black with carbon near3 fiber same (perfluoroalkylene nafion tetrafluoroethylene perfluorosulfonic ion near2 conduct\$4 near2 polymer)	US-PGPUB; USPAT	OR	ON	2007/03/28 14:14
S37	5	S36 not S34	US-PGPUB; USPAT	OR	ON	2007/03/28 14:09
S38	8	(cathode positive near3 electrode) near4 (catalyst electrocatalyst) same carbon near3 black same (carbon near3 fiber vgcf) same (perfluoroalkylene nafion tetrafluoroethylene perfluorosulfonic ion near2 conduct\$4 ptfe). not S36	US-PGPUB; USPAT	OR	ON	2007/03/28 14:20
S39	0	(cathode positive near3 electrode) near4 (catalyst electrocatalyst) same carbon near3 black same (added additive crystalline) near4 (carbon near3 fiber vgcf) not S38 not S36	US-PGPUB; USPAT	OR	ON	2007/03/28 14:21

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S40	0	(cathode positive near3 electrode) near4 (catalyst electrocatalyst) same carbon near3 black same (add\$3 crystalline) near4 (carbon near3 fiber vgcf) not S38 not S36	US-PGPUB; USPAT	OR	ON	2007/03/28 14:21
S41	8	(cathode positive near3 electrode) near4 (catalyst electrocatalyst) same carbon near3 black same (crystalline) near4 (carbon near3 fiber vgcf)	US-PGPUB; USPAT	OR	ON	2007/03/28 14:22
S42	8	(cathode positive near3 electrode) near4 (catalyst electrocatalyst) same (crystalline) near4 (carbon near3 fiber vgcf)	US-PGPUB; USPAT	OR	ON	2007/03/28 15:15
S43	245	(crystalline) near4 (carbon near3 fiber vgcf)	US-PGPUB; USPAT	OR	ON	2007/03/28 15:21
S44	44	(crystalline) near4 (carbon near3 fiber vgcf) same (electrode cathode porous pore)	US-PGPUB; USPAT	OR	ON	2007/03/28 14:45
S45	36	S44 not S42	US-PGPUB; USPAT	OR	ON	2007/03/28 14:45
S46	5	(cathode positive near3 electrode) near4 (catalyst electrocatalyst) same (crystalline) near4 (graphite vgcf)	US-PGPUB; USPAT	OR	ON	2007/03/28 15:17
S47	6	(cathode positive near3 electrode) with (catalyst electrocatalyst) same (crystalline) near4 (graphite vgcf)	US-PGPUB; USPAT	OR	ON	2007/03/28 15:20
S48	125	(catalyst electrocatalyst) same (crystalline por\$5 near3 form\$4) near4 (carbon near3 fiber graphite vgcf) not S47	US-PGPUB; USPAT	OR	ON	2007/03/28 15:21
S49	48	S48 and fuel near3 cell	US-PGPUB; USPAT	OR	ON	2007/03/28 15:27
S50	3	("3956014" "4104197" "4568442"). PN.	US-PGPUB; USPAT	OR	ON	2007/03/30 08:07
S51	3	("3956014" "4104197" "4568442"). PN.	US-PGPUB; USPAT	OR	ON	2007/03/30 08:07
S52	0	S51 and carbon near2.fiber	US-PGPUB; USPAT	OR	ON	2007/03/30 08:08
S53	1	S51 and pore near2 form\$6	US-PGPUB; USPAT	OR	ON	2007/03/30 08:08
S54	97	carbon near2 fiber with pore near2 form\$6	US-PGPUB; USPAT	OR	ON	2007/03/30 08:08
S55	14	S54 and (membrane near3 electrode)	US-PGPUB; USPAT	OR	ON	2007/03/30 08:12

## EAST Search History

S56	21	S54 same (cathode fuel adj cell electrode)	US-PGPUB; USPAT	OR	ON	2007/03/30 08:12
S57	11	S56 not S55	US-PGPUB; USPAT	OR	ON	2007/03/30 08:15
S58	11	carbon near3 black with carbon near3 fiber with (nafion ion near3 conducting)	US-PGPUB; USPAT	OR	ON	2007/03/30 08:44
S59	124	(pemfc polymer near2 electrolyte with fuel adj cell) and (oxidant oxidizing oxidizer) with (humidity)	US-PGPUB; USPAT	OR	ON	2007/03/30 08:45
S60	0	(pemfc polymer near2 electrolyte with fuel adj cell) and (oxidant oxidizing oxidizer) with (humidity with "%")	US-PGPUB; USPAT	OR	ON	2007/03/30 08:46
S61	2	(pemfc polymer near2 electrolyte with fuel adj cell) and (oxidant oxidizing oxidizer) with (humid\$6 with "%")	US-PGPUB; USPAT	OR	ON	2007/03/30 08:46
S62	7	(pemfc polymer near2 electrolyte with fuel adj cell) and (oxidant air) with (humid\$6 with "%")	US-PGPUB; USPAT	OR	ON	2007/03/30 08:50
S63	1224	(pemfc polymer near2 electrolyte with fuel adj cell) and (oxidant air) with (humid\$6 moisture water with "%") not S62	US-PGPUB; USPAT	OR	ON	2007/03/30 08:51
S64	1042	(pemfc polymer near2 electrolyte with fuel adj cell) and (oxidant air) near5 (humid\$6 moisture water with "%") not S62	US-PGPUB; USPAT	OR	ON	2007/03/30 08:51
S65	7	(pemfc polymer near2 electrolyte with fuel adj cell) and (oxidant air) near5 (humid\$6 moisture water) with "%" not S62	US-PGPUB; USPAT	OR	ON	2007/03/30 08:55
S66	3	(pemfc polymer near2 electrolyte with fuel adj cell) and (oxidant air) near5 (humid\$6 moisture water) with "%" not S65	US-PGPUB; USPAT	OR	ON	2007/03/30 08:56
S67	8	(pemfc polymer near2 electrolyte with fuel adj cell) and (oxidant air) with (humid\$6 moisture water) with "%" not S65 not S62	US-PGPUB; USPAT	OR	ON	2007/03/30 08:56